

Amendments to the Claims

Please amend claims 1, 4, 5 and 13-16 as indicated in the listing of claims.

Please cancel claims 2, 6 and 25 without prejudice or disclaimer.

The listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A short interfering RNA (siRNA) molecule that down regulates expression of a p65 subunit of NF-kappa-B gene by RNA interference, said siRNA molecule comprising a sense region and an antisense region and wherein said antisense region comprises a sequence complementary to an RNA sequence encoding the p65 subunit of NF-kappa-B and the sense region comprises a sequence complementary to the antisense region, wherein said antisense region ~~comprises~~ consists of a sequence ~~substantially~~ complementary to ~~a sequence selected from the group consisting of SEQ ID NO: 1, 2, 3 and 4~~ and wherein said antisense region ~~comprises a sequence selected from the group consisting~~ consists of SEQ ID NO: 5, 6, and 8 ~~or substantially homologous sequences thereof~~ and said sense region consists of SEQ ID NO: 9.

2. (Canceled)

3. (Original) The siRNA molecule of claim 1, wherein said sense region and antisense region are covalently connected via a linker molecule.

4. (Currently amended) The siRNA molecule of claim 1 ~~+~~ 3, wherein said linker molecule is a polynucleotide linker.

5. (Currently amended) The siRNA molecule of claim 1 ~~+~~ 3, wherein said linker molecule is a non-nucleotide linker.

6. (Canceled)

7. (Withdrawn) The siRNA molecule of claim 1, wherein said sense region comprises the sequence of SEQ ID NO: 10 and said antisense region comprises a sequence of SEQ ID NO: 6.
8. (Withdrawn) The siRNA molecule of claim 1, wherein said sense region comprises the sequence of SEQ ID NO: 12 and said antisense region comprises the sequence of SEQ ID NO: 8.
9. (Previously presented) The siRNA molecule of claim 1, wherein said sense region comprises a 3'-terminal overhang and said antisense region comprises a 3'-terminal overhang.
10. (Previously presented) The siRNA molecule of claim 9, wherein said 3'-terminal overhang comprises 1 to 5 natural or modified nucleotides.
11. (Previously presented) The siRNA molecule of claim 9, wherein said antisense region 3'-terminal overhang is complementary to RNA encoding p65 subunit of NF-kappa-B.
12. (Original) The siRNA molecule of claim 1, wherein said sense region comprises one or more 2'-O-methyl modified pyrimidine nucleotides.
13. (Currently amended) The siRNA molecule of claim 1, wherein said sense ~~strand~~ region comprises a terminal cap moiety at the 5'-end, 3'-end, or both 5' and 3' ends of said sense region.
14. (Currently amended) The siRNA molecule of claim 1, wherein said antisense ~~strand~~ region comprises one or more 2'-deoxy-2'-fluoro modified pyrimidine nucleotides.
15. (Currently amended) The siRNA molecule of claim 1, wherein said antisense and/or sense ~~strand~~ region comprises between one and up to and including five phosphorothioate internucleotide linkages at the 3' end of said antisense and/or sense region.
16. (Currently amended) The siRNA molecule of claim 1, wherein said antisense and/or sense ~~strand~~ region comprises between one and up to and including five phosphorothioate internucleotide linkages at the 5' end of said antisense and/or sense region.

17. (Previously presented) The siRNA molecule of claim 9, wherein said 3'-terminal nucleotide overhang comprises ribonucleotides that are chemically modified at a nucleic acid sugar, base, or backbone.
18. (Previously presented) The siRNA molecule of claim 9, wherein said 3'-terminal nucleotide overhang comprises deoxyribonucleotides that are chemically modified at a nucleic acid sugar, base, or backbone.
19. (Previously presented) The siRNA molecule of claim 9, wherein said 3'-terminal nucleotide overhang comprises one or more universal base ribonucleotides.
20. (Previously presented) The siRNA molecule of claim 9, wherein said 3'-terminal nucleotide overhang comprises one or more acyclic nucleotides.
21. (Previously presented) The siRNA molecule of claim 9, wherein said 3'-terminal nucleotide overhang comprises nucleotides or non-nucleotides.
22. (Original) An expression vector comprising a nucleic acid sequence encoding at least one siRNA molecule of claim 1 in a manner that allows expression of the nucleic acid molecule.
23. (Original) A mammalian cell comprising the expression vector of claim 22.
24. (Original) The mammalian cell of claim 23, wherein said mammalian cell is a human cell.
25. (Canceled)
26. (Previously presented) The expression vector of claim 22, wherein said siRNA molecule comprises two distinct strands having complementary sense and antisense regions.
27. (Original) The expression vector of claim 22, wherein said siRNA molecule comprises a single strand having complementary sense and antisense regions.
28. (Withdrawn) A method of preventing, treating or alleviating NF-kappa-B dependent conditions in an individual, comprising administering a therapeutically effective amount of a

siRNA compound of claim 1, in a suitable pharmacological carrier so that expression of the p65 subunit of NF-kappa-B is suppressed, thereby suppressing NF-kappa-B dependent processes.

29. (Withdrawn) The method of claim 28, wherein the NF-kappa-B dependent condition is selected from cancer, cardiac disorders, ischaemia, and allergic/inflammatory diseases and conditions, wherein said allergic/inflammatory diseases and conditions are selected from the group consisting of asthma, allergic rhinitis, atopic dermatitis, psoriasis, rheumatoid arthritis, ulcerative proctitis, ulcerative colitis, Crohn's disease and septic shock.

30. (Withdrawn) A method of preventing, treating or alleviating NF-kappa-B dependent conditions in an individual, comprising extracting cells, tissue or entire organs from said individual; contacting the said cells, tissue or entire organs with a siRNA molecule of claim 1, whereby expression of the p65 subunit of NF-kappa-B is suppressed, thereby suppressing NF-kappa-B dependent processes; and reintroducing the cells, tissues or organs back into said individual.

31. (Withdrawn) The method of claim 30, wherein said method is used as a step in a treatment involving a procedure selected from a group consisting of transplantation, graft, and implantation.